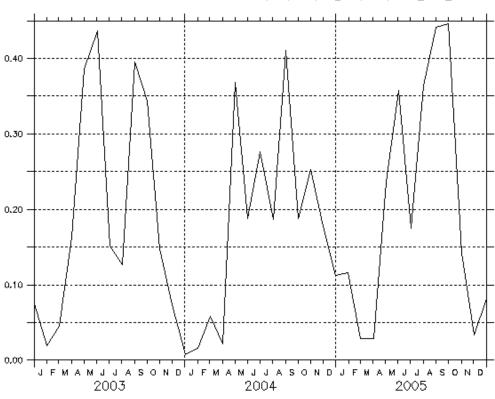
### Lesson 68: Dry Season and 'Green' Season in Costa Rica

LAS 7.+/Ferret 6.1 NOAA/PMEL

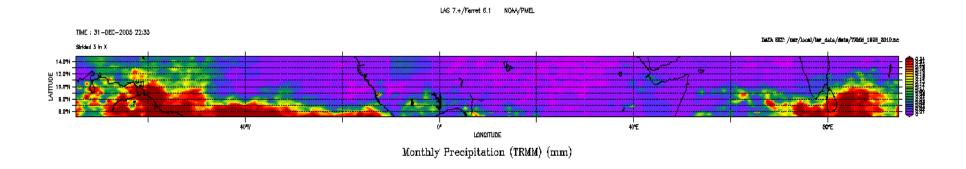
LONGITUDE : 85,1W(-85,1) LATITUDE : 10.9N

DATA SET: /usr/local/fer\_data/data/TRMM\_1998\_2010.ne

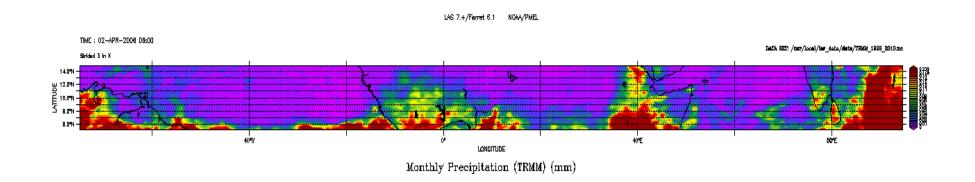


Monthly Precipitation (TRMM) (mm)

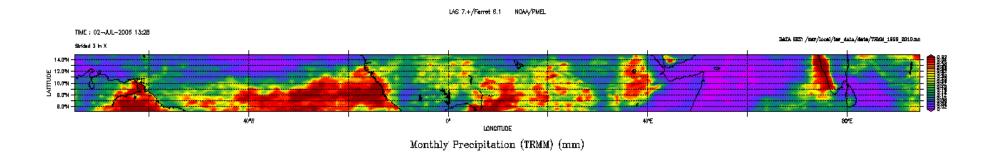
# January 2006:



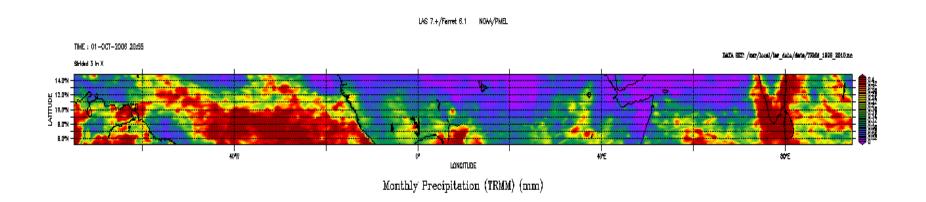
## April 2006:



# July 2006:



## October 2006:



#### **Questions:**

#### 1. What patterns do you observe in the monthly precipitation graph?

Students should notice the pattern of significantly less rain during the months of December through April. Students should be able to connect the pattern to the dry and wet seasons, invierno and verano (winter and summer).

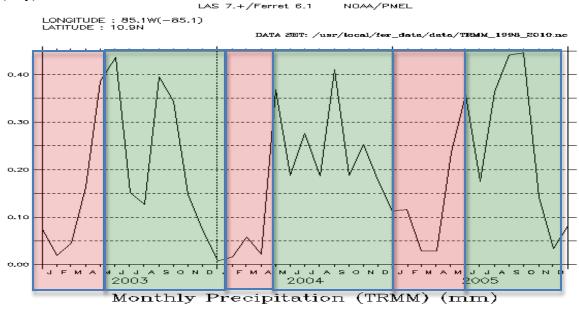
#### 2. Which months received the most rain? The least?

The most rain is generally found in the months august to November. The least amount is found from December through April.

## 3. What is the difference (in mm) between the highest and lowest monthly precipitation?

It is roughly .43 or .42 mm

# 4. Which months are part of the 'Green (wet) season'? Trace those months in green on your graph. Do the same in red for the 'high (Dry) season'.



5. Are there other countries in the region that are affected by the same seasonal pattern? Use the LAS information from Part II and an atlas to answer this question.

Yes, other regional countries are also affected by the trade winds, and many countries in the world have monsoon seasons, or "wet" and "dry" seasons as well. However Costa Rica is particularly known for its climate.

#### **Extensions:**

- 1. To emphasize the inquiry process, teacher may add the following Pre-Lesson activities:
- a. Locate Costa Rica using Internet resources or an atlas and develop theories for the possible climate and seasons at that location.

Costa Rica is in Central America, and is greatly affected by the trade winds. These winds bring moisture into the country during very specific seasons, causing the large differences in precipitation for months at a time.

b. Using travel web sites, compare the hotel rates in Costa Rica during different times of the year. Is there a difference and why?

Hotel rates should increase greatly during the dry season. Many tourists want to go to Costa Rica when it is hot, sunny, and dry enough to enjoy the beautiful beaches, so it is natural that the hotels and other tourist sites would raise their prices during this seasons in order to create more revenue. They would also lower prices during the rainy season to create more incentive for tourists to visit them year-round instead of only a few months out of the year.

- 2. Repeat Part I and Part II above using different date ranges to look for variation in the expected precipitation patterns. What could explain these differences?
- 3. Explore if any major hurricane has impacted Costa Rica. Write a report about how it may have affected the country and tourism.